

Appln. No. 10/605,984
Docket No. PES-D-00014/PES-0069

AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions and listings of claims in the application.

Listing of Claims:

1. (currently amended) An electrochemical cell comprising:
 - a first electrode;
 - a second electrode;
 - a membrane disposed between and in fluid communication with said first electrode and said second electrode;
 - a first cell separator plate opposing said first electrode and defining a first flow field there between, said first flow field proximate a first frame member; and
 - a second cell separator plate opposing said second electrode and defining a second flow field there between; said second flow field proximate a second frame member;wherein said first cell separator plate, said second cell separator plate, said first frame member, said second frame member, or a combination thereof comprising at least one of the foregoing, are at least partially coated with a layer having a coating composition comprising elemental carbon;
 - wherein particles of said elemental carbon are present in an amount of equal to or greater than about 10 wt% and equal to or less than about 20 wt% based upon a total dry weight of the coating composition;
 - wherein said elemental carbon comprises an admixture of carbon black and graphite having a graphite to carbon black weight to weight ratio of at least 1:100 and at most 100:1.

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2. (currently amended) The electrochemical cell of Claim 1, further comprising:

a pressure pad disposed proximate said second cell separator plate and retained by a pressure pad separator plate, said pressure pad separator plate proximate said second flow field;

wherein said pressure pad[,] and said pressure pad separator plate, ~~or a combination thereof comprising at least one of the foregoing,~~ are at least partially coated with a layer having the coating composition comprising elemental carbon.

3. (currently amended) The electrochemical cell of Claim 2, further comprising:

at least one of a first flow field member and a second flow field member, said first flow field member disposed at said first flow field, said second flow field member disposed at said second flow field;

wherein said first flow field member, said second flow field member, or a combination thereof comprising at least one of the foregoing, are at least partially coated with a layer having the coating composition comprising elemental carbon.

4. (original) The electrochemical cell of Claim 1, wherein the layer comprising elemental carbon has an electrical resistivity of equal to or less than about 1000 ohm-cm.

5. (original) The electrochemical cell of Claim 4, wherein the layer comprising elemental carbon has an electrical resistivity of equal to or less than about 10 ohm-cm.

6. (original) The electrochemical cell of Claim 5, wherein the layer comprising elemental carbon has an electrical resistivity of equal to or less than about 1 ohm-cm.

7-25. (canceled)

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26. (currently amended) A surface of the electrochemical cell of Claim 1 prepared by a method comprising:
electroplating the surface of the electrochemical cell to provide an elemental carbon layer thereon, said elemental carbon layer having an electrical resistivity of equal to or less than about ~~1000~~ 10 ohm-cm.

27-33. (canceled)